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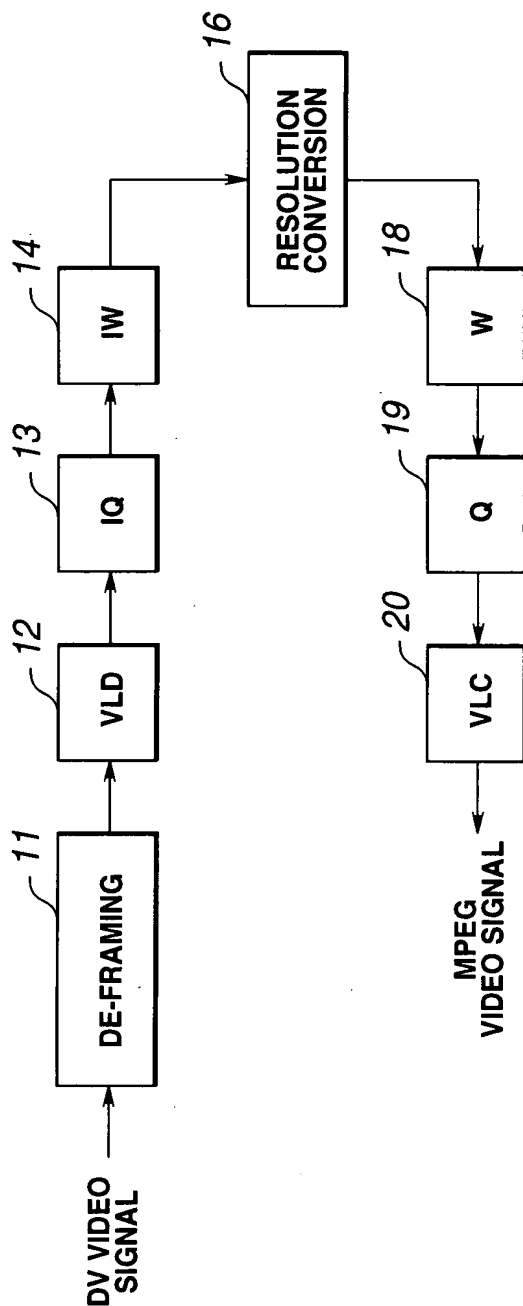


FIG.1

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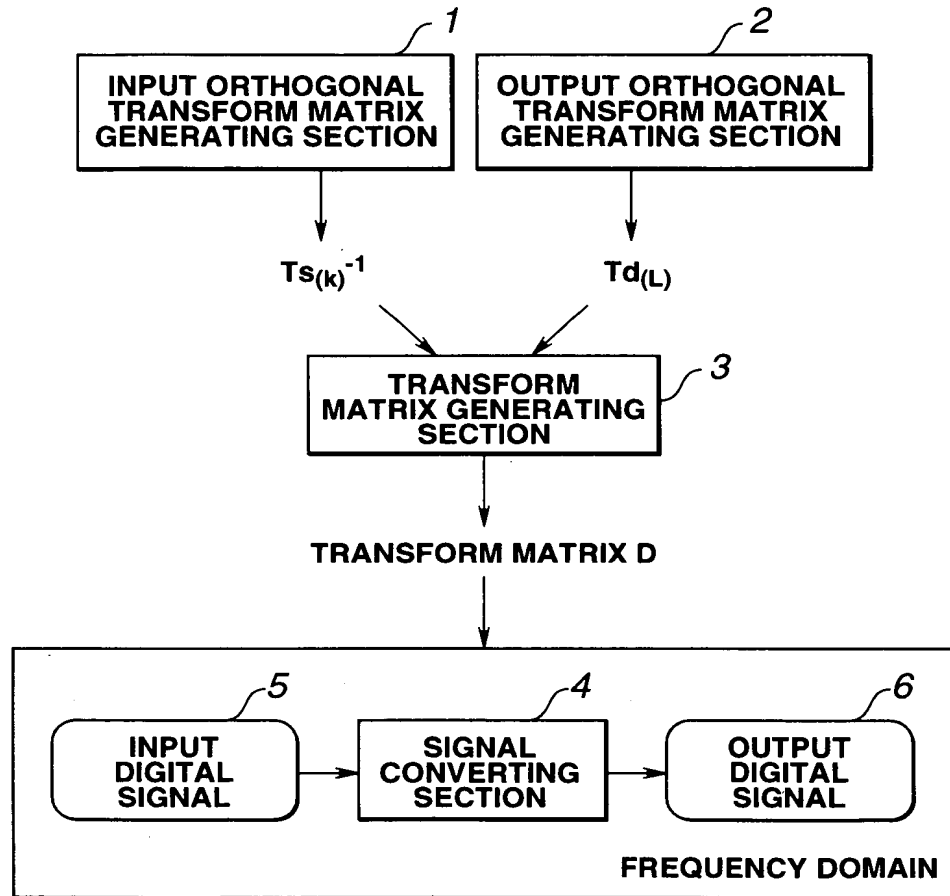


FIG.2

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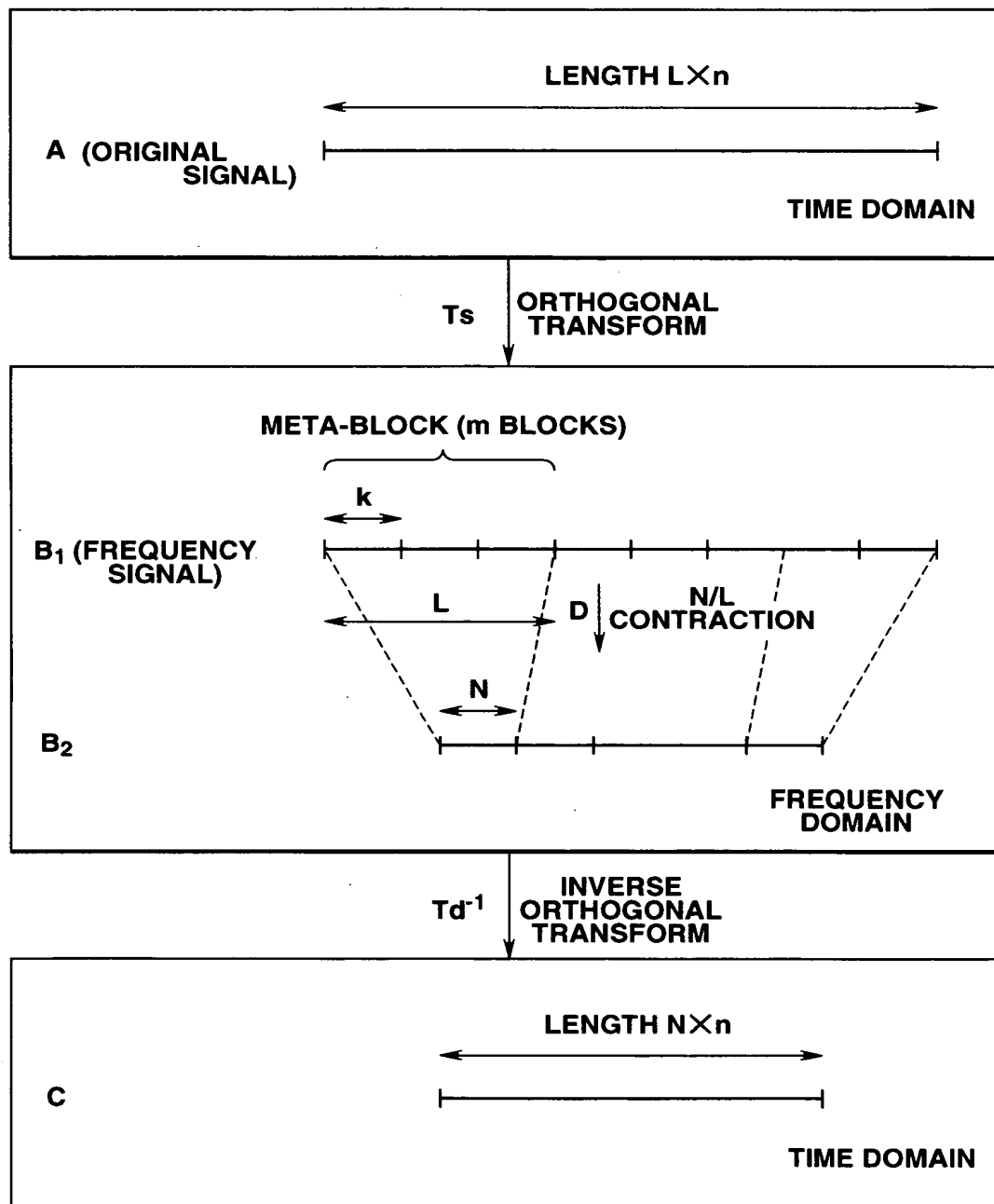


FIG.3

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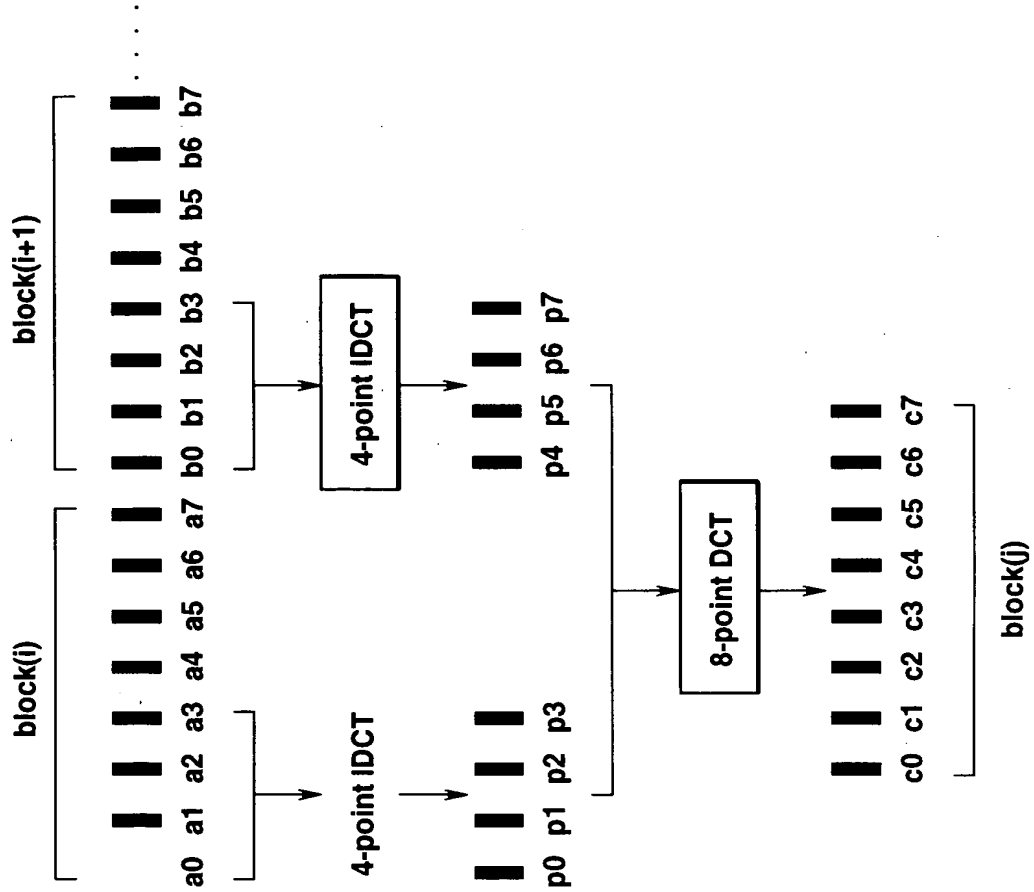


FIG.4A

FIG.4B

FIG.4C

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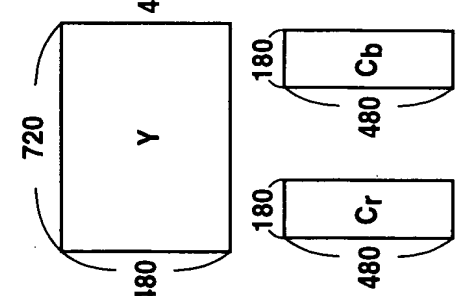
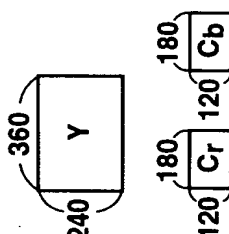
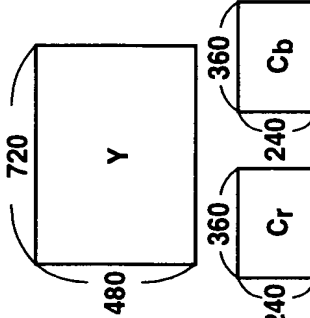
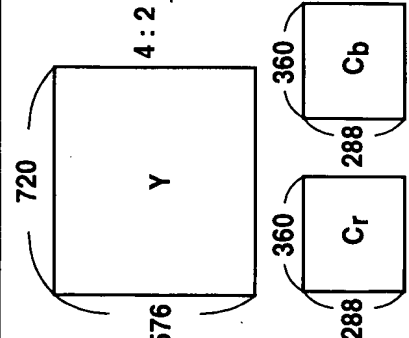
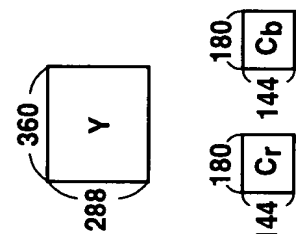
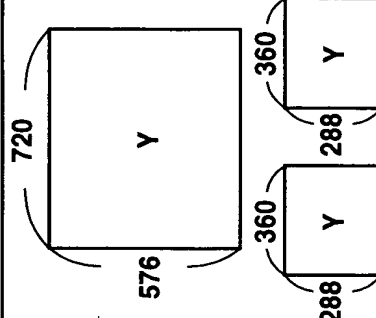
DV FORMAT	MPEG1 (4 : 2 : 0)	MPEG2 (4 : 2 : 0)
<b>NTSC</b>  <p>Y 480 720 Cr 180 180 Cb 180 180 4 : 1 : 1</p>	 <p>Y 240 360 Cr 120 180 Cb 120 180</p> <p>Y HORIZONTAL DIRECTION : 1/2 Y VERTICAL DIRECTION : 1/2 C HORIZONTAL DIRECTION : NO CHANGE C VERTICAL DIRECTION : 1/4</p>	 <p>Y 480 720 Cr 240 360 Cb 240 360</p> <p>Y HORIZONTAL DIRECTION : NO CHANGE Y VERTICAL DIRECTION : NO CHANGE C HORIZONTAL DIRECTION : DOUBLE C VERTICAL DIRECTION : 1/2</p>
<b>PAL</b>  <p>Y 576 720 Cr 288 360 Cb 288 360 4 : 2 : 0</p>	 <p>Y 288 360 Cr 144 180 Cb 144 180</p> <p>Y HORIZONTAL DIRECTION : 1/2 Y VERTICAL DIRECTION : 1/2 C HORIZONTAL DIRECTION : 1/2 C VERTICAL DIRECTION : 1/2</p>	 <p>Y 576 720 Cr 288 360 Cb 288 360</p> <p>Y HORIZONTAL DIRECTION : NO CHANGE Y VERTICAL DIRECTION : NO CHANGE C HORIZONTAL DIRECTION : NO CHANGE C VERTICAL DIRECTION : NO CHANGE</p>

FIG.5

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$$\begin{bmatrix} c_0 \\ c_1 \\ c_2 \\ c_3 \\ c_4 \\ c_5 \\ c_6 \\ c_7 \end{bmatrix} = \begin{matrix} (8) \\ \text{DCT8} \end{matrix} \begin{matrix} (8) \\ \text{DCT8} \end{matrix} \begin{matrix} (4) & (4) \\ \text{IDCT4} & 0 \\ \hline 0 & \text{IDCT4} \end{matrix} \begin{bmatrix} a_0 \\ a_1 \\ a_2 \\ a_3 \\ b_0 \\ b_1 \\ b_2 \\ b_3 \end{bmatrix}$$

TRANSFORM MATRIX D

FIG.6

SECRET FORTHEN

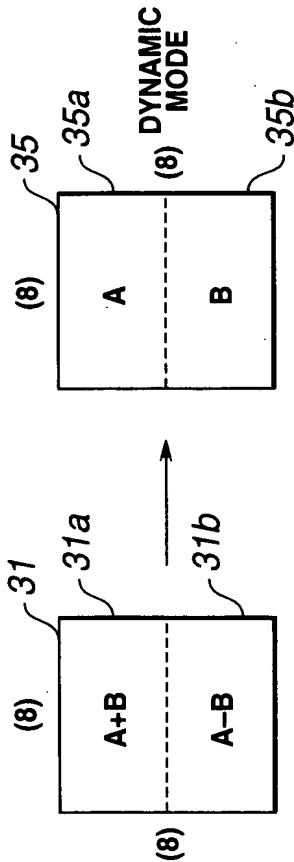


FIG. 7A

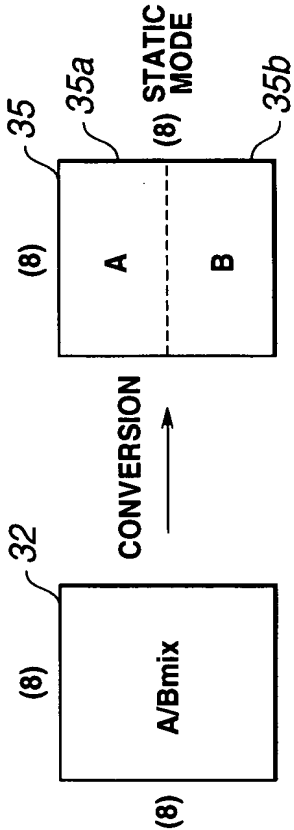


FIG. 7B

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$$\begin{bmatrix} e0 \\ e1 \\ e2 \\ e3 \end{bmatrix} \begin{array}{c} \hline f0 \\ f1 \\ f2 \\ f3 \end{array} = \begin{bmatrix} (4) & & & \\ & DCT4 & & \\ & & 0 & \\ & & & DCT4 \end{bmatrix} \begin{bmatrix} (8) \\ (8) \\ (8) \\ (8) \end{bmatrix}$$

$$\begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} \begin{array}{c} \hline 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \end{array}$$

$$\begin{bmatrix} (8) & & & \\ & IDCT8 & & \\ & & & \end{bmatrix} \begin{bmatrix} d0 \\ d1 \\ d2 \\ d3 \\ d4 \\ d5 \\ d6 \\ d7 \end{bmatrix}$$

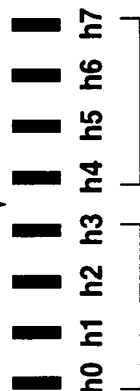
FIG.8



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8-point DCT



4-point IDCT

4-point IDCT

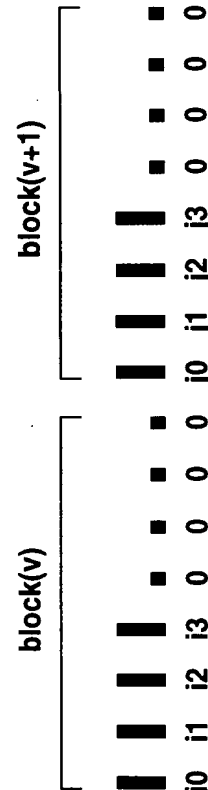


FIG.9A

FIG.9B

FIG.9C

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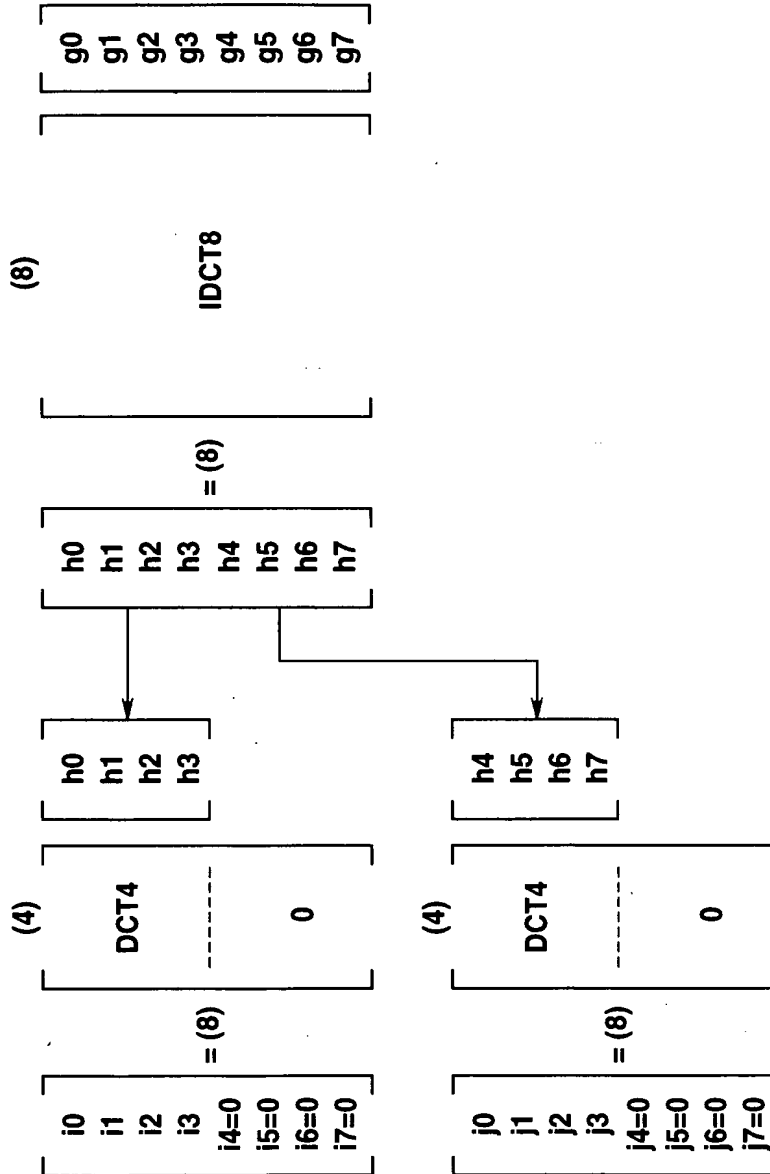
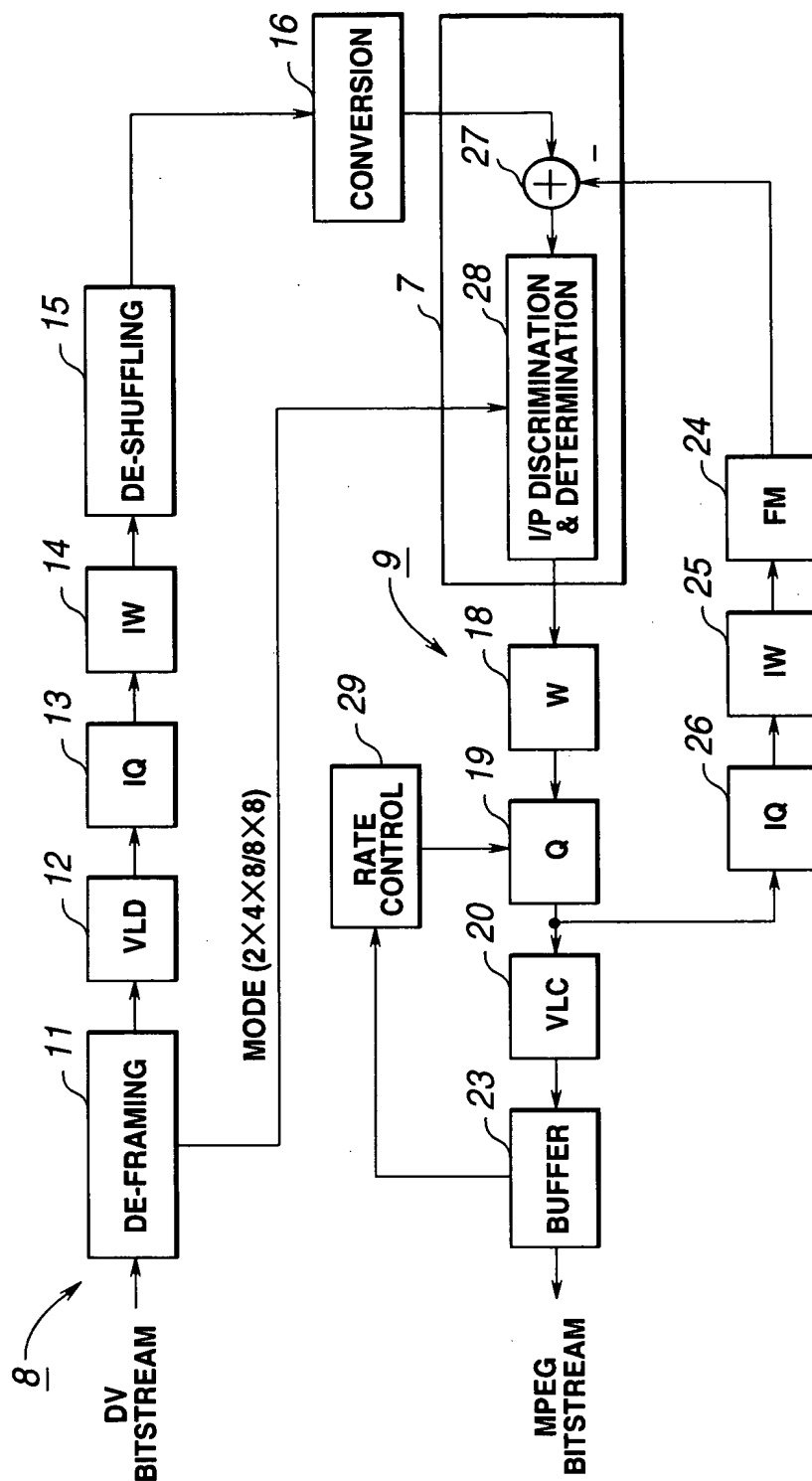


FIG.10





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**FIG. 13**



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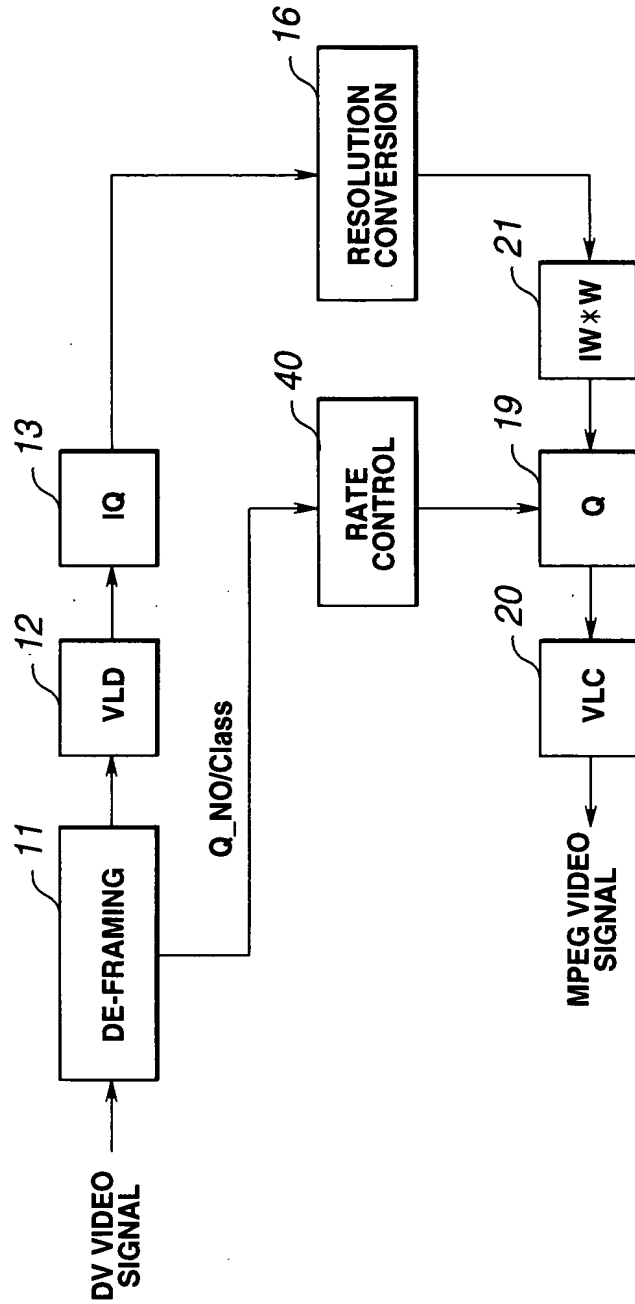


FIG.15

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

09/341401

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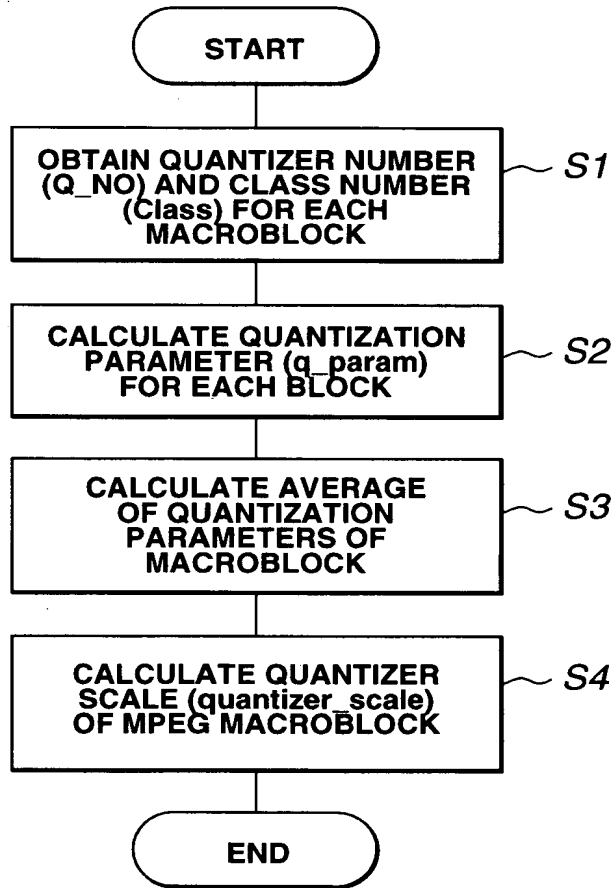


FIG.16













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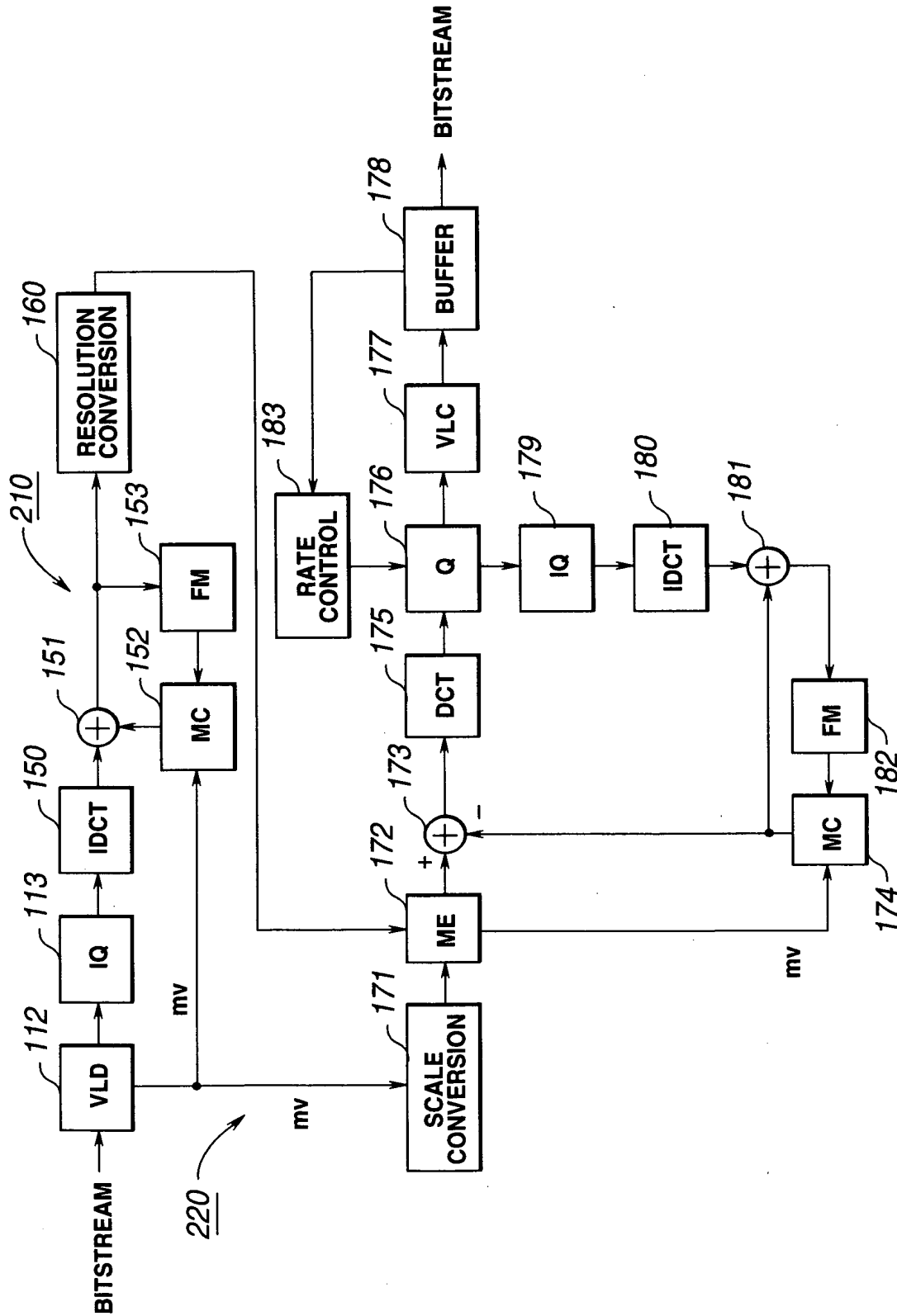
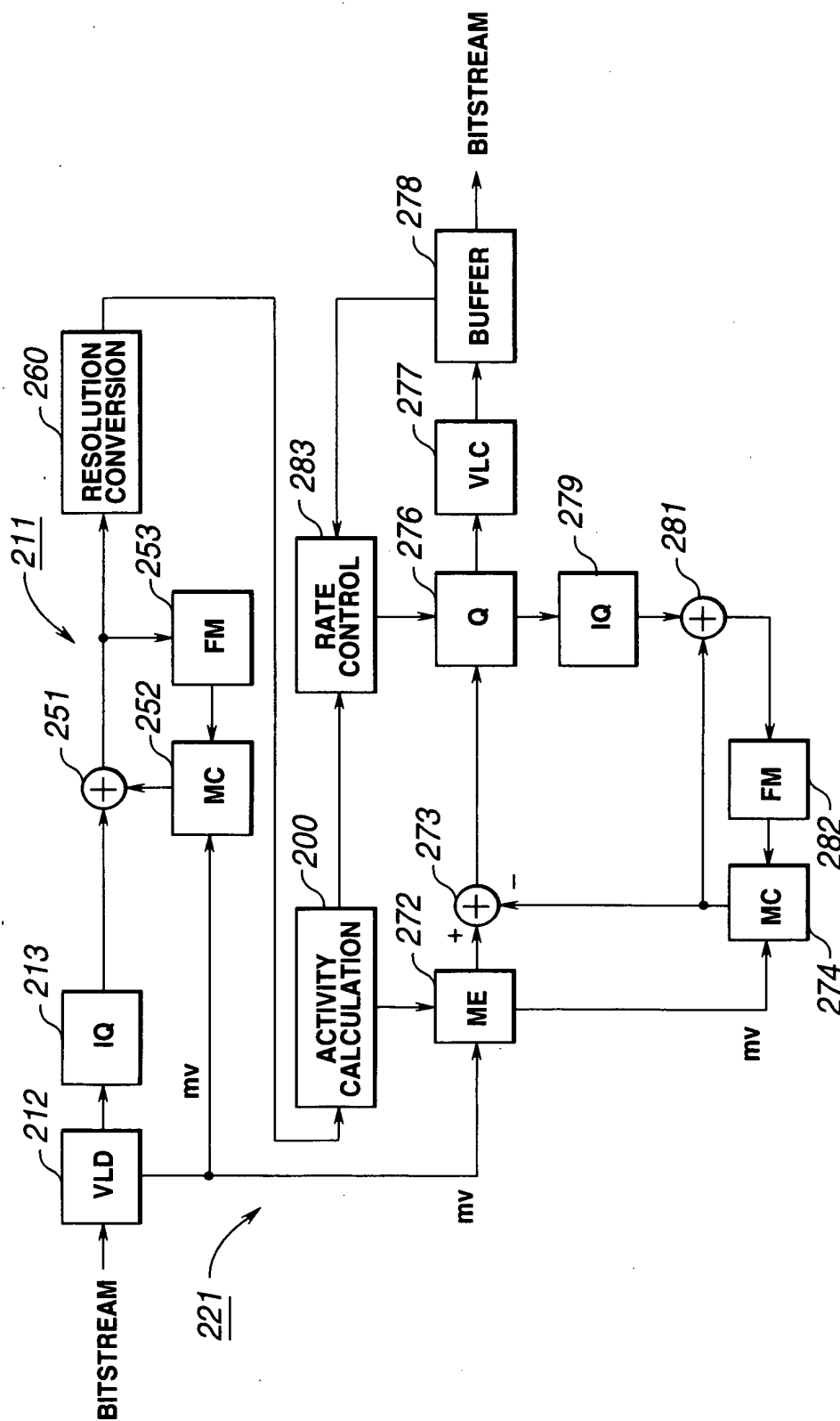


FIG.22

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**FIG. 23**

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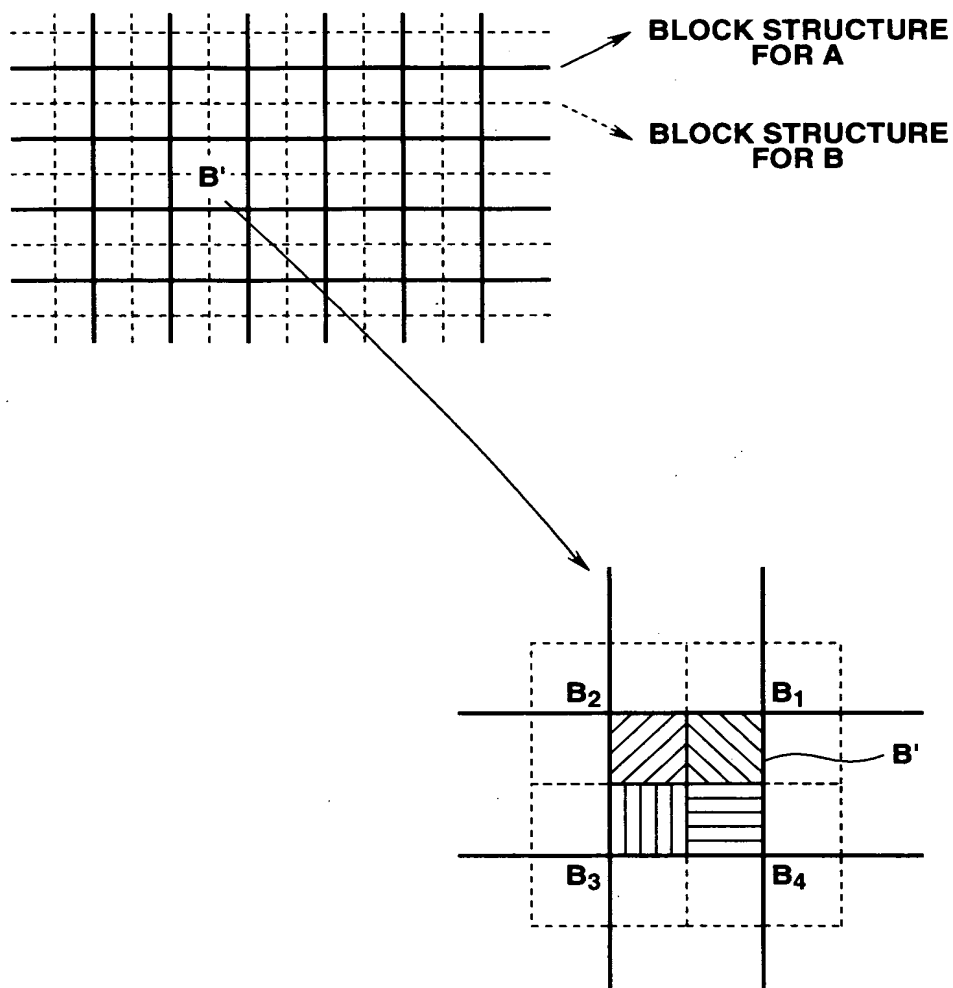


FIG.24



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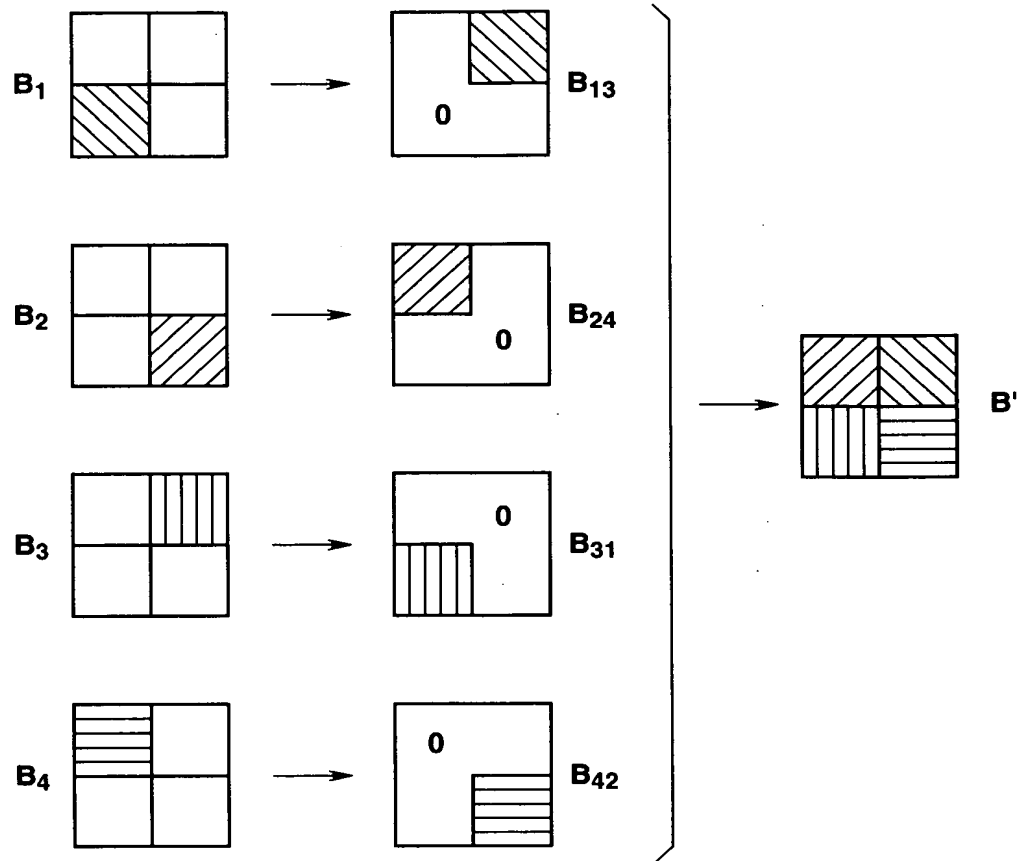


FIG.25

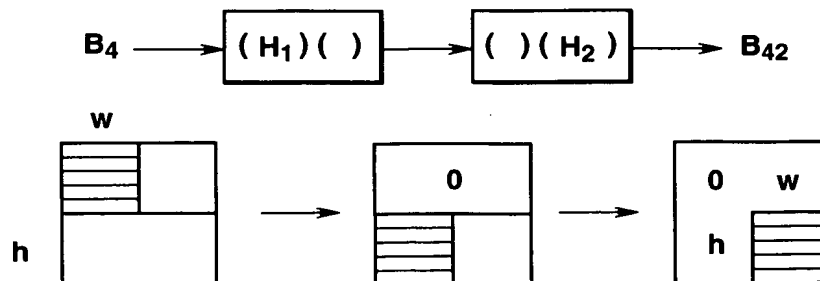


FIG.26

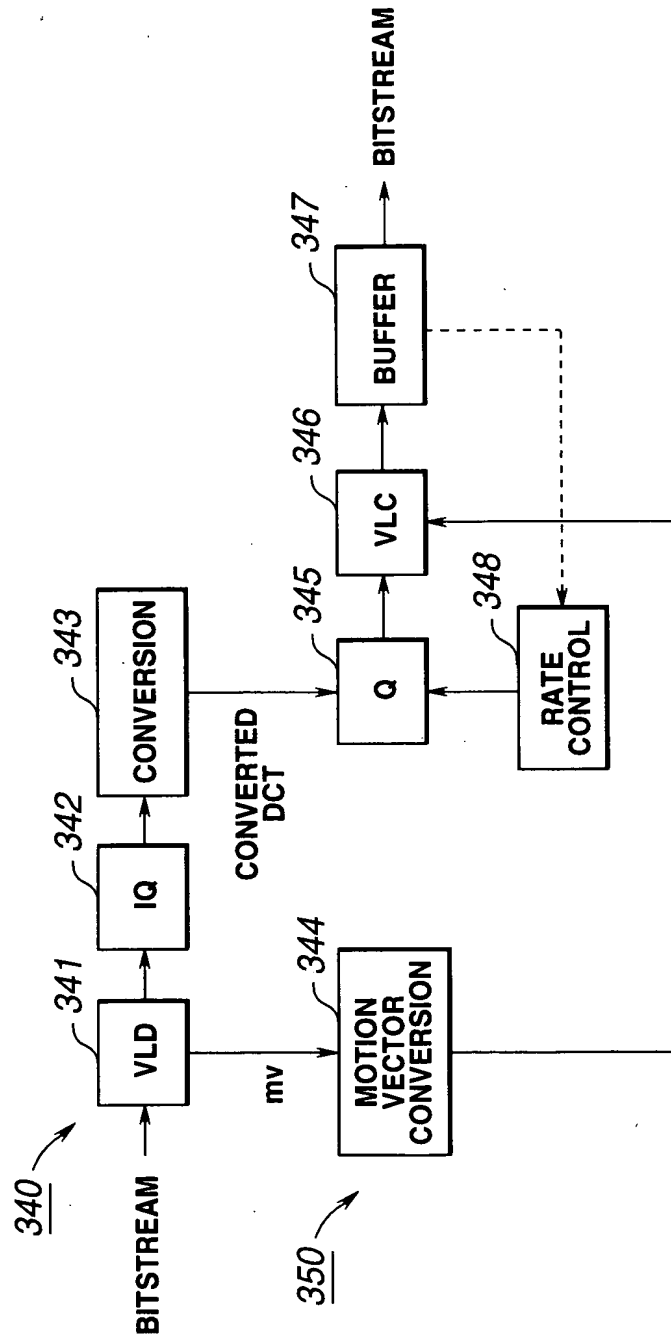
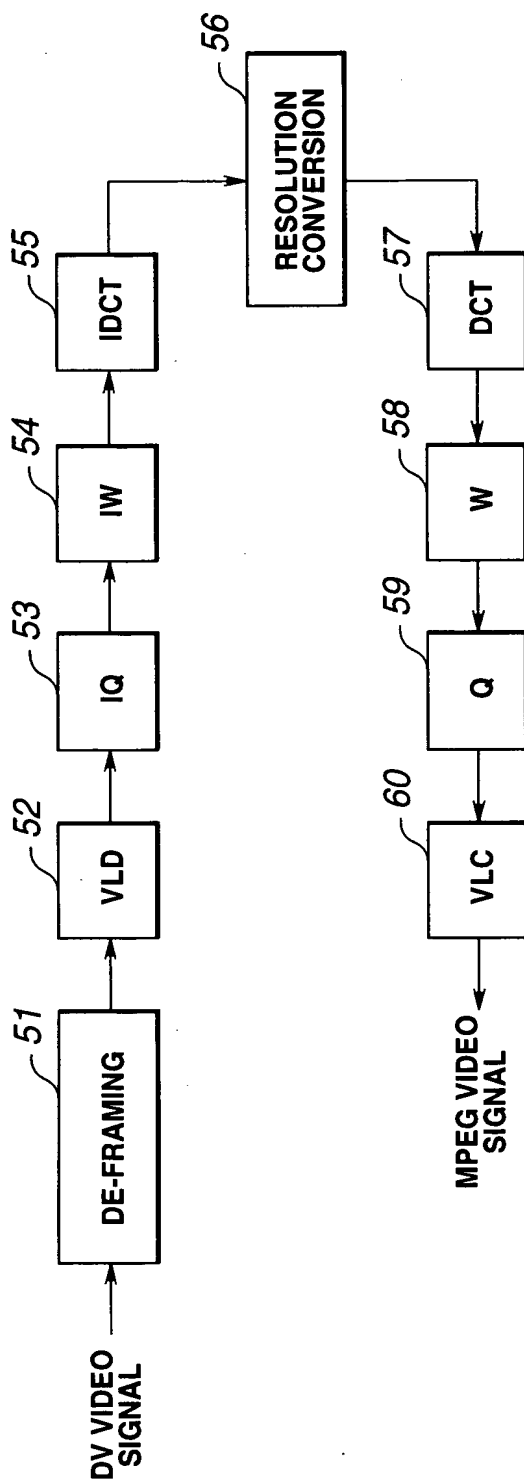


FIG.27



**FIG. 28**